

II. *On some undescribed Species of South-African Butterflies, including a New Genus of Lycænidæ.*
By ROLAND TRIMEN.

[Read 2nd December, 1867.]

SINCE the completion of my published Catalogue of South-African Butterflies, many species have been added to the list of those known to inhabit the Southern extra-tropical regions of the African continent; and among these I have been so fortunate as to meet with examples of eighteen species which appear to be undescribed. Half of the entire number is composed of species belonging to the family *Lycænidæ*, and one of these is a butterfly presenting such remarkable characters, that I am led to regard it as the type of a new genus, and have so described it, under the name of *Deloneura immaculata*.

The other nine novelties consist of two species of *Papilio* of great interest, an *Acraea*, a species of *Panopea* (family *Nymphalidæ*), and five *Hesperiidæ* belonging to the genera *Pyrgus*, *Cyclopides*, and *Pamphila*.

In treating of these hitherto undescribed insects, I have not confined myself to descriptions only, but have given all the particulars which I have been able to collect, concerning their habits and haunts, a kind of information with which we are in general very scantily supplied, but of which the Entomological Society will recognize the importance.

It is gradually becoming acknowledged that the accurate description of genera and species, highly important and indeed indispensable as it is, is not the sole end and object of Entomology, any more than of other kindred branches of Natural Science. The scientific definition of the peculiar characters of a species is, in fact, only the starting-point from which we can safely and surely proceed to investigate its relations, not only to its own near allies and immediate conditions of life, but also to other groups of organic beings, actors like itself in that great drama of Nature which, with not unfrequent shifting of scenes and change of performers, has been enacting from the remote dawn of life, and is yet in progress.

Family PAPILIONIDÆ.

Genus PAPILIO, Linn.

1. *Papilio Euphranor*, (Pl. V. fig. 1, 2).

Exp. 4 in.—4 in. 3 lin.

Hind-wings tailed. *Brownish-black, with pale sulphur-yellow band, and marginal spots.*

♂. *Fore-wing*: costa finely irrorated with yellow as far as extremity of discoidal cell, where the irrorations are so dense as to form a more or less distinct longitudinal streak; this streak with a more conspicuous one immediately below it, being the origin of a transverse band of eight well-defined elongate spots, gradually enlarging to a little beyond middle of inner margin; this band is rather abruptly angulated on first discoidal nervure, where the second spot is connected with the last of a short row of three smaller spots (in line with the six other spots of transverse band) from costa near apex; in cell, at lower edge of its extremity, a small rounded yellow spot (sometimes wanting). *Hind-wing*: macular band of fore-wing continued by a belt of the same colour (nearly straight on its inner edge, but outwardly sharply denticulated with black on the crossing nervures) which terminates narrowly on inner margin beyond middle; adjoining belt, but separated from it by a black bar on disco-cellular nervules, a curved row of three spots, of which the uppermost is largest; immediately beyond inner-marginal extremity of belt, but sometimes touching it, a small sub-lunular orange spot; a sub-marginal row of 11-12 spots arranged in pairs between nervules, the spots of the fourth and fifth pairs usually confluent; tail black, not spotted, rather broad, slightly spatulate. In *both wings*, the indentations of hind-marginal edge between nervules are marked with yellow lunules.

UNDERSIDE.—General pattern similar to that of upper-side; hind-wing and apical region of fore-wing *warm chocolate-brown, clouded with paler grayish-ochreous-brown* (which has, in many parts, a faint violaceous lustre). *Fore-wing*: upper spots of transverse band, and those of row from near apex, represented by ill-defined yellowish-white marks; cellular spot larger and more distinct, and succeeded by an additional spot just beyond cell; other spots of band as above, but each emitting a small, acute,

central projection towards hind-margin. *Hind-wing*: basal region unclouded by paler brown; an indistinct, longitudinal, bifurcate, black streak in cell; transverse belt almost white, *narrower* than above, especially in its central portion; the adjacent spots, just beyond cell, smaller, nearly white; sub-marginal spots obsolete, or but very faintly indicated; orange spot wanting, or represented by a few scales.

♀. Ground-colour not so dark; yellow markings duller, broader. *Fore-wing*: apical row of spots prolonged to sub-median nervure by five additional spots, the first of which is confluent with third spot of transverse band. *Hind-wing*: before sub-marginal spots, a row (continuous of that in fore-wing) of yellowish lunulate spots between nervules, terminating in a conspicuous orange lunule (much larger than in ♂); yellow indentation of margin beyond this lunule sometimes tinged with orange. **UNDERSIDE**.—*Fore-wing*: most of sub-marginal spots well-marked. *Hind-wing*: inner row of spots partially represented, the orange lunule distinct.

P. Euphranor should be placed in that section of the genus of which *P. Hesperus*, Westw.,* has hitherto been the solitary representative. It differs but very slightly in structure, the costa of the fore-wings being rather less arched than in *P. Hesperus*, and the apical region not quite so much produced; while the tails of the hind-wings are much broader at the base and less spatulate. *P. Euphranor* is a much smaller species; and its upper-side markings present more general resemblance to those of *P. Thersander*, Fab., and allies, than to those of *P. Hesperus*. The colouring of the underside is, however, very similar in *Hesperus* and *Euphranor*, particularly in the hind-wings, where the transverse white bands and extra-cellular spots (the latter not present on upper-side in *Hesperus*) are almost identical in form and position. A smaller, but not unimportant sign of affinity is also found on the underside of the hind-wings of both species, consisting in a peculiar arrangement of the scales, which gives the greater portion of the surface a *very fine transversely-ribbed* appearance, not observed in any other African species of *Papilio*. *Euphranor* is easily to be distinguished from the *Thersander* group by the unspotted, uniform blackness of its tails.

* *Arcana Entomologica*, i. p. 189, pl. 48. (A species inhabiting the Gold Coast, Western Africa).

This fine *Papilio* was discovered by Mr. J. H. Bowker, at the end of the year 1865, near the River Tsomo, a tributary of the Kei, in Kaffraria Proper. The species occurred in abundance at the "Boolo Forest," about the end of November, and again in February; its flight being described as "like that of *P. Menestheus*, but higher, and often extended from the forest to the open."*

A living specimen of the pupa was forwarded to me at Capetown, but the perfect insect unfortunately emerged on the journey, and remained undeveloped. Mr. Bowker described its colouring as "bright green beneath, and pale green, with light spots, on the upper side," and noted its resemblance to that of *Papilio Demoleus*. This resemblance must, however, be one of colouring only, for the form of the chrysalis differs widely, the base of the abdomen being very much wider and flatter than in the *Demoleus* pupa, while the thoracic projection is much more rounded and less prominent, and the head has two small, acute, outward projections, instead of being deeply bifid. In these respects it more resembles the chrysalis of *Papilio Nireus*, but the peculiarities are more strikingly developed than in that species.

In the Collections of the South-African Museum, A. R. Wallace, and R. Trimen.

2. *Papilio Echerioides*, (Pl. VI. fig. 1, 2).

Exp. 2 in. 9 lin.—3 in. 8 lin.

Allied to *P. Cynorta*, Fab.

♂. *Black, with a yellowish-white band, macular in fore-wing, broad and entire in hind-wing; a row of spots of the same colour on hind-margin of hind-wing. Fore-wing: band commencing near apex, and consisting of eight distinct spots, separated by woolly-black bars or nervures, and gradually increasing in width and length from the 1st and irregularly-ovate spot between 4th and 5th sub-costal nervules to inner-margin beyond middle; on edge of hind-margin, just below apex, the fringe is rather conspicuously white; the other indentations of margin being very faintly marked with whitish cilia. Hind-wing: band occupying all central region, but rather before than beyond middle, its*

* I saw several examples of this butterfly, or of a closely allied form, in a forest at Tunjumbili, on the Tugela frontier of Natal, early in March, 1867. Their flight was limited to a small open, across which they continually passed at a considerable height, often settling on the lofty trees on either side.

inner edge well defined, nearly straight, its outer edge invading the ground colour and slightly radiating on the nervures, but at the same time pierced to a little depth by black internervular rays; immediately adjoining the white internervular marks of cilia, but sometimes distinctly separated from them, a row of six conspicuous more or less rounded spots, of which the first two are smaller than the rest. **UNDERSIDE.**—Apical region of fore-wing, and hind-marginal half of hind-wing, *dark-brown*. *Fore-wing*: second spot of band very faintly marked, and, as well as first spot, confused with some *grayish-white clouding* from apex; sub-costal nervure whitish for some distance from base. *Hind-wing*: space between base and inner edge of band *warm brownish-ochreous*, with the crossing nervures, an ovate and an elongate spot between costal and sub-costal nervures, a 3-branched longitudinal streak in cell, and a streak on each side of sub-median nervure, *black*; a small *white* spot at origin of median and sub-median nervures; pale band very much narrower than on upper side, its outer half (except on costa) being obscured with *pale-brownish*, and further pierced by internervular rays, and marked with two brownish striæ in cell; hind-marginal spots smaller than above, each divided by a black internervular ray; between extremity of cell and hind-margin, immediately above discoidal nervule, *an ovate whitish spot*.

♀. Strikingly different from ♂, and closely resembling *Danaüs Echeria*, Stoll.

Fore-wing: in discoidal cell, not far from extremity, and adjoining sub-costal nervure, an oblique white mark, of variable size and shape; beyond cell, a short, oblique, white bar, crossed by 1st discoidal nervule; a large, ovate, white spot just below cell, between 2nd and 3rd median nervules (its upper edge sometimes extending over 2nd median); a conspicuous spot below apex touching white mark on cilia, and a sub-marginal row of four other similar white spots, between 1st discoidal nervule and sub-median nervure. *Hind-wing*: central band *pale ochreous yellow* (occasionally dull whitish yellow), broader, its inner edge being nearer base, but so greatly narrowed on costa and—to a less extent—on inner-margin, that it assumes the form of an externally-rounded patch; marginal spots *white*, larger than in ♂, the lower ones not so close to the hind-margin, occasionally a small additional one at anal angle. **UNDERSIDE.**—Much as in ♂, with the exception of the very different white markings of fore-

wing, which agree with those of the upperside. *Fore-wing*:* 1st spot of row of four wanting; all other spots rather larger. *Hind-wing*: basal ochreous narrower than in ♂; two or three central spots of marginal row always more or less obliterated; spot between cell and hind-margin always present, occasionally large and irregular in shape.

An unusually small ♀ specimen in my collection has all the pale markings ochreous-yellow instead of white.*

As regards the ♂ sex, *P. Echerioides* presents many marks of distinction from its nearest ally, *P. Cynorta*, Fab. (*Zeryntius*, Boisd.), of which the following may be noticed, viz. 1°, the band of *fore-wing* is much narrower than in *Cynorta*, its inner edge being at some distance from discoidal cell, and its outer edge much further from hind-margin; 2°, this band is continuous, and gradually widening from its origin, while in *Cynorta*, it is abruptly interrupted, the 2nd spot being absent or nearly obsolete, and the 3rd very large; 3°, the outer edge of the band is slightly concave instead of convex, and the composing spots are narrower and less blunt internally, the black separating rays being broader; 4°, in the *hind-wing*, the band is usually narrower than in *Cynorta*, its inner edge being further from base, while its outer edge is almost even, instead of being sharply and regularly dentated by the internervular rays; 5°, the conspicuous hind-marginal spots are wholly wanting in *Cynorta*.† On the underside, 6°, the inner edge of the band of *fore-wing* is rather further from the discoidal cell than it is on the upperside, while in *Cynorta* it is so close as partly to touch the extremity of the cell; 7°, a small whitish disco-cellular spot is sometimes found in *Cynorta*, but there is no trace of it in *Echerioides*; 8°, in the *hind-wing*, the basal ochreous is darker and redder, extending further along costa, and the outermost of its two black spots is more elongate; 9°, the band is considerably narrower, the inner edge not so even, the brownish clouding of its outer border more defined; 10°, the internervular rays are not so strongly marked; 11°, the spot between cell and hind-margin is not found in *Cynorta*. As a rule, *Echerioides* is considerably larger than *Cynorta*.

With reference to the ♀, I may mention that there is no room for doubt as to the specific identity of the two

* A similar variation of colouring is not uncommon in *Danais Echeria*.

† Prof. Westwood (Arc. Ent. pl. 40, f. 3, 4) figures an example in which these spots, though very small, are present.

sexes described above, Mr. Bowker having repeatedly observed them *in copulâ*, and having forwarded to me two pairs captured by him in that condition. A well-established case of this description affords us something like reliable grounds for reconciling other so-called "distinct species," and resolving them into the differing sexes of one insect. Every year's discoveries prove to us that arbitrary entomological decrees of divorce are far more numerous in our collections than we had any idea of. The determination, beyond dispute, of the ♀ *Echerioides* has led me to search for the same sex of *P. Cynorta*, there being only ♂s of the latter in the National and other collections. I have found, it is true, nothing resembling the ♀ *Echerioides*; but, placed next to *P. Cynorta*, in most arrangements, is the *P. Boisduvallianus* of Westwood, an insect only differing from *Cynorta* in the arrangement of the white markings of the anterior wings,—the very character by which the ♀ *Echerioides* seems, at first sight, so remote from the ♂. *Boisduvallianus* most accurately imitates the colouring and pattern of *Acræa Gea*, Fab. (♀), another West-African butterfly;—how closely may be inferred from the fact that associated with three specimens of the *Papilio* in the British Museum I found an example of the *Acræa*!—but the resemblance is scarcely more remarkable than that existing between the ♀ of *P. Echerioides* and *Danaïs Echeria*.

Both the perfect examples of *Papilio Boisduvallianus* in the National Collection are ♀s; the third wants the abdomen, but all its characters coincide with those of the two others; and the only example in Mr. Swanzy's collection (from the Gold Coast) is of the same sex. All the four specimens of *P. Cynorta* in the British Museum, as well as others in the Hope Museum, and in the collections of Mr. Salvin and Mr. Hewitson, are ♂s. I am convinced after careful comparison, and from analogy with the case of *Echerioides*, that *P. Boisduvallianus* is the ♀ of *Cynorta*; and should this be eventually proved, a better distinction between the two species, the ♂s of which are so nearly alike as those of *Cynorta* and *Echerioides*, could not be wished for, than the fact of one ♀ wearing the livery of an *Acræa* and the other that of a *Danaïs*.*

* The point in which the ♀ *Echerioides* most differs from *Danaïs Echeria*, and most resembles as well as its own ♂ as *P. Cynorta* and *P. Boisduvallianus*, is in the basal colouring of the underside of the hind-wings, which is almost identical in all the four.

The first specimen of this species that I received was taken by Archdeacon Kitton, of King William's Town, in the Perie Bush, a mountain forest some miles from the town, in April, 1863. This example, a ♂, reached me in a very damaged state, and I erroneously considered it to be *P. Messalina*, Stoll, and so recorded it in my "Rhopalocera Africae Australis," pt. ii. p. 329. Mr. J. H. Bowker subsequently forwarded a number of specimens of both sexes, from the Sogana and Boolo forests, near the river Tsomo, in Kaffraria. His notes on the species are very graphic and interesting, and I gladly append the more important of them. In February, 1865, he found the ♂ "numerous at one spot in the forest, where the large yellow-wood trees had been cut away; they kept flying in one regular track, more regular than that of any other *Papilio* that I have seen on the wing." During the next month, he notes the flight as "low, seldom above the weeds and undergrowth, and rarely extending beyond the 'bush.'" In November, both sexes made their appearance "in great numbers, but disappeared in four weeks' time." In January, 1866, a "fresh brood" came out, and the species was "the most common butterfly at the Boolo," and remained on the wing during February. "The ♂ takes a constant course through the forest, returning regularly by the same route; while the ♀ keeps about the place, but flying at a lower elevation, and does not appear to take the rounds of the ♂. The sexes disappeared together at the end of November, and did not appear again until early in January, when they both came out on the same day. . . . The two pairs I send were taken *in copulâ*. The ♂ and ♀ meet, whirl about amongst the tops of plants in the forest, and, as soon as united, disappear down under the leaves, and have to be hunted up without the net."

I took both sexes of this species, on the 8th of March, 1867, in woods at Tunjumbili, on the Tugela frontier of Natal. The ♂s were tolerably numerous, but I only saw two ♀s, and, at the first glance, mistook one of them for *P. Cenea*, Stoll,* which is still more closely imitative of

* There is good ground for considering *Papilio Cenea* to be the ♀ of *P. Merope*, Cram. No ♂ *Papilio* with the colouration of *Cenea* is known to exist, while all the specimens of *Merope* are ♂s; and the colouring of the body, the position of the apical spot of the fore-wings, and the markings of the hind-wings (chiefly on the under-surface) are so much alike in the two forms as to support the belief that they are sexes of the same species, apart from the collateral evidence of *habitat*, &c. I propose to treat of

Danais Echeria. The flight of the insects quite confirmed Mr. Bowker's description, the ♂s coursing pretty rapidly and irregularly over the underwood, while the ♀s hovered flutteringly near the ground, and often settled on leaves.

In the Collections of the South-African Museum, A. R. Wallace, and R. Trimen.

Family ACRÆIDÆ.

Genus ACRÆA, Fab.

Acræa Anacreon, (Pl. VI. fig. 3, 4, 5).

Exp. 1 in. 10 lin.—2 in. 7 lin.

♂. *Fulvous-ochreous*; each wing with a discal transverse row of black spots, and a black hind-marginal border marked with spots of the ground colour.

Fore-wing: a conspicuous rounded black spot in discoidal cell, near extremity; another spot, narrower and more oblique, on disco-cellular nervules; seven spots in irregular discal row, of which the 5th and 6th are largest, the first (near costa) usually indistinct, and the 7th (on inner margin beyond middle) frequently wanting; costa edged with black, which widens into a broad apical border containing seven spots of the ground-colour; this border gradually narrows to a thin edging at anal angle, its inner edge radiating on the nervules, but leaving the last two spots confluent with the ground-colour; between summit of discal row and marginal border often some indistinct yellowish-white scaling; base clouded with black, widest on inner margin. *Hind-wing*: no black spot on disco-cellular nervule, but one in cell, near extremity; another spot before middle, between costal and sub-costal nervules; seven spots in irregular discal row, of which the last two are largest; black hind-marginal border moderately broad, diminishing slightly towards anal angle, more or less radiating inwardly on nervules, and enclosing eight sub-lunulate spots rather paler than the ground-colour, or (sometimes) whitish-yellow; basal black rather deeply piercing cell, and extending broadly

this and some similar cases more fully in another paper; but it is right to note here that the ♀ of what is generally regarded as a Madagascarene variety of *Merope* (viz. *P. Meriones*, Felder), does not widely differ from the ♂.

below median nervure to rather beyond origin of 3rd nervule; inner margin beyond middle tinged with whitish-yellow in those specimens in which the marginal spots are of that hue. **UNDERSIDE.**—*Hind-wing*, and costal border and apical region of *fore-wing*, whitish-yellow; the extremities of all the nervures strongly defined with black. *Fore-wing*: spots as above; more or less conspicuous fulvous internervular rays from hind-margin stripe the yellow of apical region. *Hind-wing*: spots as above, but larger, those of discal row often touching; below median nervure a black transverse stripe of three contiguous spots extends to inner margin, and almost touches the 8th and last spot of discal row; base marked with two rather large, black-edged pink spots; immediately before discal spots a row of pink marks, indistinct or obsolete near costa, but large and conspicuous towards inner margin; spots of hind-marginal border whitish-yellow, and so much larger than above as to reduce the black to a narrow edging; before these spots are very faint internervular fulvous rays. In *both wings*, the basal black is wanting, but the costa is marked with a small, distinct, black spot close to base.

♀. *Semi-transparent grayish-ochreous*; an indistinct, dusky-whitish, costal bar outwardly bordering first three spots of discal row; black of hind-marginal borders duller, rather broader. *Fore-wing*: an additional, elongate spot, before middle, just below median nervure. *Hind-wing*: a minute spot usually marking the 1st disco-cellular nervule. **UNDERSIDE.**—Yellowish colouring paler; internervular rays obsolete, or nearly so; pink markings of hind-wing duller, especially those on disk, which are sometimes wanting.

A ♂ specimen, taken in Kaffraria by Mr. Bowker, has the whitish-yellow costal scaling developed into a distinct whitish bar like that of the ♀; and there is a similar, but much smaller whitish marking on costa of hind-wing.*

This *Acraea* is very distinct from all the described species. It is intermediate between *A. Rahira*, Boisdu. (its nearest ally) and *A. serena*, Fab. Besides the bright fulvous colouring of the ♂, and the greater transparency of the ♀, *Anacraea* may easily be distinguished from

* It is remarkable that some examples of this *Acraea* have the wings much more elongated than those of the majority; and in these the spots and markings are more attenuated. This peculiarity is observable in both sexes.

Rahira by its possession of a *maculated hind-marginal border*. This character is presented by *A. serena*, but the small size of that species and its want of any discal spots in the fore-wings preclude the possibility of confounding *Anacreon* with it.

In April, 1865, two ♂ specimens, taken on the banks of a small river called the Sogana, were received by me from Mr. Bowker, and these Kaffrarian examples were the only ones I had seen until March, 1867, when I found the species pretty commonly in the Umvoti District of Natal, particularly near Greytown and about the Noodsberg. Like *A. Rahira*, the butterfly delights in damp, reedy spots, and has a very weak, low flight. It frequently settles on flowers, and the ♀s may easily be taken with the fingers. I met with *Rahira* in the same region, and often in the same spots, but it was not more abundant than *Anacreon*.

In the Collections of the South-African Museum, and R. Trimen.

Family NYMPHALIDÆ.

Genus PANOPEA, Hübn.*

Panopea Tarquinia, (Pl. V. fig. 3).

Exp. 2 in. 11 lin.—3 in.

♂. *Brownish-black, with white and yellowish-white bands.*
Fore-wing: an outwardly convex band of four white spots, of which the 1st (smallest) is in discoidal cell close to its extremity, and the 4th (largest) between 2nd and 3rd median nervules; two wide, elongate, yellowish-white spots, one on each side of sub-median nervure, form an irregular patch on inner margin rather beyond middle; two obliquely-lying sub-quadrangle white spots between white band and apex, one on each side of 1st discoidal nervule; a very narrow line of pure-white edges costa from a little beyond middle, ending *at apex* in a conspicuous white spot extending to the cilia immediately adjoining. *Hind-wing*: a broad yellowish-white band, continuous of inner-marginal patch of fore-wing, occupies middle; its inner edge not far from base, slightly crene-

* Verz. Bek. Schmett. p. 39. A genus allied to *Diadema*, but distinguished by its much longer, very gradually-clavate *antennæ*; shorter, more convergent *palpi*, with much shorter terminal joint; and by the strongly inward-curved nervule closing discoidal cell of *fore-wing*, which joins the median nervure exactly at the origin of the 2nd median nervule. These characters approximate *Panopea* to *Romalæosoma*.

lated,—its outer edge regularly and sharply dentated by internervular black rays from hind-margin. In *both wings* indistinct traces of a sub-marginal row of dull-whitish spots; cilia with white internervular dots.

UNDERSIDE.—*Ground-colour pale ochreous-brown* except brownish-black discal region of fore-wing. *Fore-wing*: a small white spot at origin of sub-costal and median nervures; a fulvous-ochreous streak along costa for some distance from base; a black longitudinal ray in cell, confluent with discal black; white band and spots larger than above, especially spot at apex, which is widely suffused inwardly; a third spot, very much smaller than the other two, at lower end of bar between band and apex; four or five small white spots in a sub-marginal row between 1st median nervule and anal angle. *Hind-wing*: base, as far as inner edge of band, *dull fulvous-ochreous*, with eight black spots, viz. one on costa at base, one on each side of pre-costal nervure, three in cell, and one on each side of 1st sub-costal nervule; four of these mark the edge of central band, which is broader than above; a sub-marginal row of small white spots in pairs between nervules; internervular rays more conspicuous than above.

♀ Unknown.

This species is closely allied to *P. Lucretia*, Cram., but as far as the ♂ sex is concerned, presents the following differences, viz. in *fore-wing*—1°, the white bar of two spots is square, and does not radiate towards hind-margin; 2°, the inner-marginal patch is yellowish-white, and does not extend to 3rd median nervule; 3°, the white costal edging and apical spot are not found in *Lucretia*; while in *hind-wing*,—4°, the band is *yellowish-white*, and much broader, extending nearer to base. On the underside in *fore-wing*, 5°, *Tarquinia* wants both the whitish scaling in cell, and the conspicuous white radiation from sub-apical bar; 6°, the median band is wider; 7°, the sub-marginal white spots are smaller and fewer; while in *hind-wing*—8°, the basal ochreous is broader; 9°, the sub-marginal spots much smaller; and 10°, the inter-nervular streaks fainter. The white lateral stripe and spots of the abdomen are smaller and yellower than in *Lucretia*.

This butterfly bears a very remarkable resemblance to *Acræa Aganice*, Hewits.,* the shape and position of the

* The West-African *Lucretia*, with its much more conspicuous sub-apical white marking, bears a strong likeness to *Acræa Lycoa*, Godt., a native of the same region.

central bands, the colouring, and particularly the basal markings of the underside of hind-wing, being singularly similar; but the *Panopea* has a short sub-apical white bar not found in the *Acræa*. The latter marking is, however, not noticeable in flight; and I fully believed the first example that I met with to be *Acræa Aganice*, (which was common in the same wood), until it settled on the damp pathway immediately before me. I searched in vain for a second specimen on that day, as well as on many subsequent occasions in the woods near Port Natal; but, on the 24th February, 1867, on the edge of a forest near the village of Verulam, about twenty miles northward of D'Urban, I met with another individual. This example exactly imitated, not only the slow floating flight of *Acræa Aganice*, but also its invariable habit of settling occasionally, with closely-shut *dependent* wings, on the projecting twigs of the outermost trees on the edge of the wood. There is reason to believe that the species is rare, as the daily forest-hunting of myself and my Kafir collector for several weeks never resulted in the capture of another example; nor have I seen one in any collection, either from Natal or the adjoining South-African regions.*

In the Collection of R. Trimen.

Family LYCÆNIDÆ.

Genus DELONEURA, n. g.†

Head wide, flattened anteriorly, clothed with scales superiorly: *eyes* prominent, smooth; *palpi* naked, ascendant, widely divergent, the second joint much swollen, the terminal joint slender, acute, rather short; *antennæ* of moderate length, stout, very gradually incrassated, the extremity slightly curved outwards. *Thorax* short, stout, smooth and with scattered scaling anteriorly, thinly hairy posteriorly. *Wings* large, broad, the hind-margins very convex. *Fore-wings* with costa strongly arched from base to middle, thence nearly straight; apex well defined, anal angle smoothly rounded off; inner-margin convex

* Since this paper was read, I have seen two examples in the Collection of Mr. Hewitson; one, from the Zambesi, being similar to the two specimens here described, the other, from Natal, larger and with yellowish bands.

† From *δηλος* and *νεῦρον*.

near base ; costal nervure short, not extending to middle ; sub-costal with five branches, of which four end on costal edge, and the 5th on hind-margin immediately below apex ; two discoidal nervules dissociated from the sub-costals, and having a common origin at upper part of extremity of discoidal cell ; the cell itself short, blunt, closed by a straight slender nervule. *Hind-wings* almost ovate ; costa gently arched ; inner-margins enveloping underside of abdomen at base, and thence gradually divergent ; costal nervure short, but ending a little beyond middle ; discoidal nervule separated from sub-costals at its origin by a short disco-cellular nervule ; discoidal cell short, blunt, its straight closing nervule meeting the 1st and 2nd medians at their common origin. *Legs* very stout, smooth, without hairs ; the femur and tibia of each about equal in length ; tarsi of front pair perfectly developed, 5-jointed, the ungues distinct.* *Abdomen* rather short and thick, compressed laterally, arched in the centre, enlarged posteriorly.

I was for some time in much doubt as to the relations of this peculiar genus, but having, at the suggestion of Mr. A. G. Butler, of the British Museum, carefully compared it with the American genus *Eumenia*, Blanch. (*Eumæus*, Hübn.), I feel satisfied that its proper position will be with that group of butterflies. Apart from the strong mark of affinity in the distinctly-closed wing-cells, there is great similarity in the general structure and proportions of the body, and especially in the characters of the legs. Differences amply warranting the generic distinctness of *Deloneura* are, however, plainly observable. In the latter the antennæ are curved, instead of straight and rigid as in *Eumenia* ; the palpi considerably shorter, more ascendant and divergent, the terminal joint more slender, the middle joint much swollen : in the *fore-wing* there are five sub-costal nervules, instead of only three, while the discoidal nervules have a common origin, in place of being widely separated as in *Eumenia* ; and in the *hind-wing*, the closing nervule of cell meets the 1st and 2nd median nervules at their

* I regret that paucity of examples of the species on which this genus is founded (of the three individuals before me two are the property of the South-African Museum) prevents me from actually ascertaining by dissection whether the fore tarsi are identical in both sexes ; but, judging from the external characters of the abdomen, the much larger size, and the more rounded wings of one specimen, I believe it to be a female, while the other two have the aspect of males. The fore tarsi are precisely similar in these three specimens.

common origin, while in *Eumenia* it is oblique, and only meets the 1st median some way from its origin.

The plain ochreous colouring of the type of *Deloneura* is strikingly different from the rich dark hues of *Eumenia*.

Deloneura immaculata, (Pl. V. fig. 4).

Exp. 1 in. 5 lin.—1 in. 9 lin.

Yellow-ochreous, without spot or marking of any description.

UNDERSIDE.—Hind-wing, and costal and hind-marginal region of fore-wing *slightly paler*.

Thorax, head, palpi, antennæ, and legs *dull-black*; the antennæ tipped, and the back of thorax scaled with *ochreous*; abdomen *ochreous* beneath, ochreous mixed with blackish above.

Hab. Bashee River, Kaffraria.

Entomology is indebted to Mr. J. H. Bowker for the discovery of this remarkable butterfly, which took place at the end of December, 1863. In some letters addressed to me about that time, Mr. Bowker notes the species as "a true forest insect, only found in or at the edge of woods, and appearing but for a few days. In flight they resemble *Acreea Horta*, and still more the *yellow tree-moth*,* whirling slowly, with flapping wings, round the tops of trees, rising and falling, sailing away and returning."† The species would seem to be extremely local, Mr. Bowker not having met with it elsewhere than on the Bashee River, though constantly collecting in many other parts of Kaffraria in which he has been stationed.

In the Collections of the South-African Museum and R. Trimen.

Genus ZERITIS, Boisd.

1. *Zeritis Sardonyx*, (Pl. V. fig. 5; Pl. VI. fig. 6, 7).

Exp. 1 in. 8 lin.—2 in. 1 lin.

♂. *Orange-fulvous* (not metallic), with *brownish-black*

* Mr. Bowker here alludes, I believe, to a species of *Aroa* (a genus of Liparideous Bombycina allied to *Orgyia*) which abounds in the wooded regions of South Africa,—*A. crocata*, Walker.

† Mr. Salvin informs me that he has observed *Eumeniæ* on the wing in Central America, and that their flight, with the exception of being lower, is not unlike that here described.

markings and hind-marginal borders. *Fore-wing*: base with a blackish suffusion; costa bordered with creamy- or vinous-ochreous from base to a little before middle, thence with brownish-black to apex; hind-marginal border broad, of tolerably even width to anal angle, where it is considerably enlarged; a slightly-irregular, macular, transverse band extends from costal border to join hind-marginal border on 3rd median nervule; a small rounded black spot in discoidal cell; marking extremity of cell a larger, squarer spot, confluent with costal border. *Hind-wing*: a shining, pale grayish-ochreous space at base, adjoining costa; lower basal region with blackish suffusion; apical region occupied broadly with brownish-black, which parts to form a hind-marginal edging disappearing before attaining sub-median nervure, and a broader discal ray ending rather abruptly on 3rd median nervule; inner-margin whitish; anal-angular lobe and caudal projection vinous-ochreous. *Cilia* of both wings conspicuously varied with black and white.

UNDERSIDE.—*Hind-wing, and margins of fore-wing, varying from dull vinous- to dark ferruginous-ochreous.* *Fore-wing*: the following *silvery-white* black-ringed spots, viz. two cellular, and a band of six beyond middle (representing the markings of upperside); and an additional spot in cell near base; orange ground-colour paler than above. *Hind-wing*: two conspicuous pure-white, short, transverse streaks, at a little distance apart, between costal and sub-costal nervures, about middle; beyond middle, a similar, much longer, slightly-irregular streak extending from 1st sub-costal nervule to inner-margin; adjoining the latter streak a grayish inner-marginal space, extending narrowly along margin—outwardly to lobe at anal angle, and inwardly as far as a small narrow white mark. *Cilia* of the ground-colour, varied with whitish.

♀. *Considerably larger, paler, markings similar.* *Fore-wing*: hind-marginal border comparatively narrower, the space of ground-colour between it and transverse band broader. *Hind-wing*: black from apical region not so extended, only the commencement of the discal ray being present, and ending on 1st median nervule, and the hind-marginal edging being narrower. UNDERSIDE.—Quite as in ♂.

A much-injured specimen of the ♀, in the South-African Museum, has the discal markings obscure and much reduced in size, especially the macular band of

fore-wing, which ends on 2nd median nervule, without meeting hind-marginal border.

This very distinct *Zeritis* has no close ally known to science. In general structure, outline of wings, and character of the upperside markings, it is nearer to *Z. Perion*, Cram., than to any other; but, besides its much greater size, and paler colour, it has no trace of the brilliant gilded spots of that species, but pure-white streaks on the underside of the hind-wings; while the remarkably long and porrected palpi are widely different from those of *Perion*, and approximate the insect to *Z. malagrida*, Wallengren, and allies.

Z. Sardonyx inhabits the north-eastern portion of the Cape Colony. In November, 1864, two specimens were forwarded to me for identification, respectively by Mr. J. J. Muskett, M.R.C.S., of Murraysburg, and Mr. D. Kannemeyer, junior, of Burgersdorp. I have subsequently received four fine examples from Mr. Muskett, who captured them "only in the neighbourhood of a particular bush on a hill-side near Murraysburg."

In the Collections of the British Museum,* the South-African Museum, and R. Trimen.

2. *Zeritis Chrysantas*, (Pl. V. fig. 6).

Exp. 1 in. 2 lin.

Sub-metallic pale-orange, with black spots and narrow hind-marginal borders; cilia broad, conspicuously varied with black and white. Fore-wing: an elongate black spot marking extremity of discoidal cell; an irregular discal row of five small spots, of which the 3rd and 5th are beyond the line of the other three, extending from close to costa to 3rd median nervule; base narrowly grayish; on costa, beyond middle, three minute, oblique, white lines, separated by black; a rounded whitish spot at apex, touching white cilia; hind-marginal border broadest at apex, narrowing to anal angle, its inner edge dentated with orange on median nervules. *Hind-wing:* base narrowly grayish; no discal spots; hind-marginal border broadest near costa, its inner edge irregularly dentate with orange on nervules.

UNDERSIDE.—*Hind-wing, costal edge and apical and hind-marginal border of fore-wing, pale grayish-ochreous, varied with whitish. Fore-wing:* orange paler; an addi-

* A ♀ specimen, presented by Mr. Kannemeyer.

tional, sub-marginal row of six black spots, of which the upper three are filled with glittering-brassy; 1st spot of transverse row, two small additional spots on costa, spot closing cell, and two additional spots in cell, also marked with dense glittering-brassy scaling; an additional blackish spot before middle, just below median nervure; an indistinct hind-marginal row of small whitish lunules, commencing with that at apex. *Hind-wing*: the following glittering-brassy, brownish-edged spots, viz. three in cell—1st (minute) at base, the 2nd (larger) midway, the 3rd (large) at extremity; two near base—one just below costal, the other just below median nervule; nine forming a regular sub-marginal row—the 3rd and 4th conspicuously clouded with dark-brown; a discal, rather irregular row of nine whitish-gray spots, of which the 1st, 2nd, 8th and 9th are more or less marked with brassy scales; several quadrate whitish marks interspersed between the brassy spots; hind-marginal lunules as in fore-wing, that next anal angle largest, inwardly edged with dark brown.

The only specimen I have seen is, I believe, a ♀, but the abdomen having unfortunately been devoured by insects on the voyage to England, I cannot be certain as to the sex. The species is allied to *Z. Zeuxo*, Linn., but is readily distinguished both from that species and from *Z. Chrysaor*, mihi, by the *hind-wings being spotless above, and metallic-spotted beneath*, as well as by the broad, chequered cilia.

This beautiful *Zeritis* formed one of an interesting collection made by Mr. and Mrs. Muskett, at Murraysburg, and kindly presented to me by them in July, 1864.

In the Collection of R. Trimen.

3. *Zeritis Lyncurium*.

Exp. 1 in.—1 in. 1½ lin.

♂. *Metallic golden-red, with narrow hind-marginal black borders.* *Fore-wing*: base slightly blackish; costa narrowly black to beyond middle, where the edging widens to join hind-marginal black border, which is broadest at apex, and the inner edge of which is irregularly dentated with red on median nervules; a narrow black spot at extremity of cell; sometimes an indistinct smaller spot in cell; usually from one to four small spots indicative of a discal transverse row. *Hind-wing*: base and costa

clouded with blackish, sometimes very broadly; occasionally a faint narrow mark at end of cell; hind-marginal black border very sharply dentated with red on median nervules. **UNDERSIDE.**—*Hind-wing*, and costal and upper hind-marginal border of fore-wing, pale-brownish- or ferruginous-ochreous. *Fore-wing*: discal row distinct, irregular, of six spots, extending to sub-median; an additional sub-marginal row of five or six minute spots; below median nervure, a blackish suffusion from base, and a black spot; spot closing cell, two spots in cell, two minute costal spots, 1st spot of discal row, and first three spots of sub-marginal row, more or less marked with glittering-steely scales. *Hind-wing*: the following inconspicuous darker markings, here and there edged inwardly with dull-metallic scales, viz., a narrow marking closing cell; a spot in cell; two elongate spots between costal and sub-costal nervules, before middle; and an irregular discal row; along hind-margin, indications of some paler lunulate markings. Cilia dull-gray, varied with blackish.

♀. *Rather larger, paler.* *Hind-wing*: costal clouding narrower, not so dark; red indentations of marginal border deeper, almost reaching hind-marginal edge. **UNDERSIDE.**—Spots better marked; but the steely scaling much duller and fainter, and wholly wanting in some spots.

Nearly allied to *Z. Chrysaor*, mihi, but differing in its smaller size, darker colour, broader hind-marginal borders, the imperfection of discal row of spots in fore-wing, and its entire absence in hind-wing, and particularly in the broad costal black clouding of hind-wing, no trace of which is found in *Chrysaor*; while, on the underside, the discal band of fore-wing is less irregular, and inclines inwardly instead of towards anal angle,—the sub-marginal spots are more distinct,—and the steely markings of the spots are fewer and much less brilliant; and the markings of hind-wing are more glistening and defined.

This *Zeritis* was discovered by Mr. J. H. Bowker, near the River Tsomo, in December, 1864. In that month and the following one, he captured a good many specimens, but only in two spots, “flitting about stunted bushes growing between rocks, upon a lofty hill-ridge.” *Z. Chrysaor* inhabits the same parts of Kaffraria, but has a wide range from Cape Town to Natal.

In the Collections of the South-African Museum and R. Trimen.

Genus APHNÆUS, Hübn.

Aphnæus Caffer.

Aphnæus Natalensis, Hewits. *Illustr. Diurn. Lep.*, II.
pl. xxv. fig. 1, 2, (nec Doubl.).

Exp. 1 in.—1 in. 4 lin.

Closely allied to *A. Natalensis*, Doubl.

♂. Blue, paler, not so violaceous as in *Natalensis*.
Fore-wing: three conspicuous, transverse ochreous-yellow stripes, all commencing a little below costa,—the 1st short, crossing cell,—the other two long, beyond middle, usually narrowly confluent on second median nervule.
Hind-wing: anal-angular orange brighter and wider, the metallic central dot marking it smaller. UNDERSIDE.—All the golden-striped, black-edged transverse bands, filled with orange-ochreous, instead of dull-purple. *Fore-wing*: no spot on costa at base, or at origin of inner sub-marginal streak. *Hind-wing*: base and inner margin rather widely orange-ochreous; transverse band beyond middle inclining outward rather than inward, its extremity always joining inner sub-marginal streak, which is orange throughout, instead of dull-purplish.

♀. Similar to ♂; cellular band of fore-wing obscured with blue; the outer bands broader, more widely confluent at lower extremity. UNDERSIDE.—Quite like that of ♂.

Cilia in both sexes pale orange-ochreous instead of dull-grayish.

The differences above noted are so constant in a long series of specimens, that I consider it impossible any longer to regard the two forms as specifically identical, although, when I had seen but one example (from Sierra Leone) of *A. Caffer*, I regarded it as a variety of *Natalensis*.* *A. Caffer* is smaller than *Natalensis*, and approaches nearer to *A. Vulcanus*, Fab., particularly in the underside markings of the hind-wings.

Accompanying the distinction of colours and markings is a difference of *habitat* and haunts. The true *Natalensis* is a forest butterfly, and I never met with it away from the low coast region of Natal; while *Caffer* inhabits the upland grassy hills of the interior of the Colony. Both species are swift and active flyers, but settle frequently, *Natalensis* preferring the leaves and flowers of tall shrubs, and *Caffer* those of low plants among the grass.

In the Collections of the British Museum, the South-African Museum, W. C. Hewitson, and R. Trimen.

* See "Rhopalocera Africæ Australis," ii. p. 228.

Genus LYCÆNA, Fab.

1. *Lycæna Barberæ*, (Pl. V. fig. 7).

Exp. 6-8 lin.

Dark-brown: cilia broad, white, interrupted with brown at ends of nervures. *Hind-wing*: a very indistinct hind-marginal row of blackish dots. **UNDERSIDE**.—*Brownish-gray* (the hind-wing irrorated with whitish); each wing with a brownish incompletely white-ringed spot at end of cell; a rather irregular discal row of similar confluent spots; and a double sub-marginal row of white lunules. *Hind-wing*: along hind-marginal edge, and inwardly bounded by double row of white lunules, a row of black, brilliantly golden-dotted spots, of which the 3rd, 4th, 5th, and 6th are large and conspicuous; a golden mark (without black) at anal angle; two round, dark-brown, white-ringed spots near base, one above, the other below cell.

The sexes appear to be alike, excepting for the rather larger size of the ♀. The discoidal cell is remarkably short in both fore and hind-wings, its termination being considerably before the middle.

The nearest allies to this minute species with which I am acquainted are two *Lycæna* in the British Museum; one from Ceylon, labelled "*L. Chinga*," the other from California, and named "*L. exilis*;" but I am not aware that either of these has been described. *L. Barberæ* differs from both in its broader, blunter wings, dark-brown colour above, and broad white cilia interrupted with brown. The Californian species presents the peculiar character of a strong sub-metallic reddish gloss on the outer half of the fore-wing beneath; and, above, the wings have a bluish suffusion at the bases.

I have named this *Lycæna*, which may fairly dispute with the Californian species the distinction of being the smallest of known butterflies, in honour of Mrs. F. W. Barber, of Highlands, near Grahamstown, who has rendered important services to South-African Entomology. The first examples of the insect that I received were taken by Mrs. Barber and Mr. H. J. Atherstone in the neighbourhood of Highlands. I have since received specimens from the Tsomo River, from Burghersdorp, and from Murraysburg, respectively captured by Mr. Bowker, Mr. Kannemeyer, and Mr. Muskett; so that the insect would appear to be widely distributed in the eastern portion of the Cape Colony, and beyond the frontier. Mrs. Barber notes it as occurring "within an

extensive range of about ten yards, on a single hill-side, and flying close to the ground;" and Mr. Bowker also describes it as a ground-loving species. It is easy to understand how so minute an insect may escape notice, especially if it keep about spots of very limited extent.

In the Collections of the South-African Museum and R. Trimen.

2. *Lyccena Otacilia*.

Exp. 11 lin.—1 in.

♂. *Shining-violaceous*. *Fore-wing*: apical region, as far as end of discoidal cell and first median nervule, *rufous-brown*; borders of the same colour extend along costa to base, and hind-margin to anal angle. *Hind-wing*: a rufous-brown border, widest on costa, from base to anal angle; a rather conspicuous black spot on hind-margin between second and third median nervules; below the latter nervule, the trace of a similar spot. **UNDERSIDE**.—*Pale brownish-gray*: in each wing, the ordinary spot at end of cell, discal band of spots, and hind-marginal row of lunulate spots, darker than ground-colour, and incompletely ringed with white. *Fore-wing*: no spot near base; discal band curved inward below cell. *Hind-wing*: three rounded, dark, small, white-ringed spots near base, that above cell conspicuous, the other two (respectively in cell and below it) faintly marked; discal band so curved as half to encircle spot at end of cell,—part of its outer white edging confluent with inner white edging of lunulate spots; hind-marginal spot inwardly edged by an orange lunule; a minute, similarly-coloured spot at anal angle. *Cilia* dull-whitish.

♀. Unknown.

In one specimen* all the spots of the underside are much narrowed, their white edgings being widely and universally suffused.

This species is allied to *L. Emolus*, Godt., but is much smaller. The bright violaceous of the upperside, with the broad brown borders, render it easily distinguishable. The under-surface is more like that of the ♀ *Emolus*, and approaches also that of *L. Amarah*, Guérin, but differs from the former in possessing distinct basal spots on hind-wings, and from the latter in the want of the black basal bar of fore-wings.

Mr. Taats, of Swellendam, gave me an example, taken near that place, at the close of the year 1864; and I have

* From Swellendam, in the Cape Colony.

subsequently received specimens from Grahamstown, captured by Mrs. Barber, and from the River Tsomo, taken by Mr. Bowker. Of the special haunts or habits of this *Lycæna*, I have no information.

In the Collections of the South-African Museum and R. Trimen.

3. *Lycæna Tsomo*.

Exp. $9\frac{1}{2}$ —11 lin.

♂. *Pale shining-brown*; in each wing, the base narrowly tinged with purplish-black, and a faint pinkish-violaceous suffusion over median nervure and nervules, extending into discoidal cell. *Hind-wing*: a blackish hind-marginal spot between 2nd and 3rd median nervules. *Cilia* shining-grayish. **UNDERSIDE**.—*Pale ochreous-gray*. *Fore-wing*: the usual disco-cellular spot and discal macular band scarcely paler than the ground-colour, incompletely bordered with whitish; hind-marginal lunules almost obsolete; a whitish-ringed spot in cell, similar to that at extremity. *Hind-wing*: *macular discal band remarkably straight, externally bordered by a suffused whitish band*; an indistinct transverse macular band before middle, but no separate spots; hind-marginal lunules rather more apparent than in fore-wing; black spot distinct.

♀. *Darker*; the violaceous suffusion much less, scarcely perceptible in hind-wing. **UNDERSIDE**.—All the markings more distinct. *Hind-wing*: a spot closing cell, immediately before discal band.

On the upperside, this *Lycæna* much resembles the ♀ *Lysimon*, Ochs., but is widely different on the underside, which is very like that of *L. Bætica*, Linn., though on a smaller scale.

Mr. Bowker discovered this species in January, 1865, near the River Tsomo. It was "very numerous," in that month and the following, "in reedy, swampy spots near water."

In the Collections of the South-African Museum and R. Trimen.

4. *Lycæna notoba*.

Exp. $11\frac{1}{2}$ lin.—1 in. 2 lin.

♂. *Shining opalescent-violaceous*; a very narrow hind-marginal brownish border to each wing; *cilia* whitish, broadly interrupted with brownish. **UNDERSIDE**.—*Brownish-gray*: in each wing, usual spot at end of cell, and macular

discal band scarcely darker than ground-colour, bordered with whitish. *Fore-wing*: macular band broad and curved; outer white edging of spot at end of cell prolonged towards inner margin; a similar spot in cell; hind-marginal lunules acute, indistinct. *Hind-wing*: macular discal band curved and irregular; a similar band before middle; a small, black, steely-dotted spot, inwardly edged by a faint-orange lunule, between 2nd and 3rd median nervules; a similar very minute spot at anal angle.

♀. *Grayish-brown; the violaceous duller, and, in each wing, only extending over median nervure and part of cell and median nervules. Hind-wing*: two distinct bluish lunules inwardly edging hind-marginal blackish spots near anal angle. **UNDERSIDE**.—All the markings more distinct than in ♂, especially the hind-marginal whitish lunules.

The wings of this very distinct-looking *Lycæna* are rather more elongate than usual. I know of no species having close affinity with it.

Mr. Muskett forwarded to me, in 1864, specimens of this butterfly, taken near Murraysburg. In the following year he also kindly sent me some examples; and, in 1866, Mr. David Arnot, of Colesberg, presented me with a ♂ specimen captured in the Trans-Vaal territory.*

In the Collections of the South-African Museum and R. Trimen.

Family HESPERIIDÆ.

Genus PYRGUS, Hübn.

Pyrgus Sandaster, (Pl. V. fig. 9).

Exp. 11 lin.

♂. *Shining-blackish, with minute white spots; cilia blackish, interrupted with white. Fore-wing*: five minute white dots on costa, at ends of nervules; a narrow elongate white mark across cell, near extremity; an irregular discal row of five spots, strongly angulated inwardly, extending from costa to 3rd median nervule. *Hind-wing*: a spot in cell, near extremity; a row of three spots on disk, between discoidal and 3rd median nervules. **UNDERSIDE**.—*Fore-wing*: base whitish, especially on costa; a square white spot on costa before middle; a faint white streak marking end of cell; some whitish scaling at apex. *Hind-wing*: ground-colour irrorated with whitish, densely so along inner margin; base whitish; two sharp-

* The late Rev. J. Frédox also forwarded to Cape Town a ♀ of this species, taken at Motito, in Bechuana Land.

ly-defined ziczac transverse white streaks,—one before middle, including cellular spot,—the other beyond middle, interrupted near costa, slightly radiating on median nervules, and including discal spots.

This species is readily distinguished from the known South-African *Pyrgi*, by the very small size of the white spots of upperside, and by the dark underside ground-colour, with the two narrow, distinct, transverse, white streaks of the hind-wings.

The only specimen that I have seen is the ♂ above described. It was taken by Mr. Muskett, near Murraysburg, and kindly presented to me by that gentleman in the year 1864.

In the Collection of R. Trimen.

Genus CYCLOPIDES, Hübn.

1. *Cyclopides Syrinæ*, (Pl. V. fig. 8).

Exp. 1 in. 1 lin.—1 in. 2 lin.

♂. Dusky grayish-brown, irrorated with pale-yellowish. *Fore-wing*: a pale yellowish spot in discoidal cell, near extremity; a discal row of six or seven smaller spots of the same colour, viz. three or four forming an oblique transverse outward-inclining streak between end of cell and apex, and three others (rather larger), of which the lowest is indistinct, in an inward-inclining line between 1st median nervule and sub-median nervule; a hind-marginal row of six elongate, indistinct, yellowish marks, some of which are occasionally obsolete. *Hind-wing*: a clothing of yellowish-gray hairs from base over cell and along inner margin; the trace of a yellowish spot in cell; two spots on disk, between discoidal and 3rd median nervules; a row of hind-marginal marks, much as in fore-wing, but rather confused towards anal angle. Cilia of the ground-colour, slightly mixed with yellowish. **UNDERSIDE**.—*Hind-wing*, and costa and apex of fore-wing, thickly irrorated with yellow. *Fore-wing*: only upper spots of discal row distinct, and these (as well as cellular spots, and lower discal spots) sometimes almost obsolete. *Hind-wing*: two longitudinal stripes from base to hind-margin, one creamy-white, broad, traversing discoidal cell, the other narrow, whitish, between median and sub-median nervures; no spots.

This *Cyclopides* may be said to combine the characters of *C. Malgacha*, Boisd., and *C. Lepeletierii*, Godt., differing from the former in having conspicuous pale stripes on the underside of the hind-wings, and from the latter

in being spotted with yellow. Its size, ground-colour, and hind-wing markings render it, however, a nearer ally of *C. Lepeletierii* than of *C. Malgacha*.

Mr. Bowker discovered this curious *Cyclopid*, on the 19th January, 1867, on the summit of Gaika's Kop, the highest point of the Amatola Mountains, being about 6,800 feet above the sea-level. He notes the species as being "very numerous among the *Mountain Bamboos*, flitting about in hundreds, but not found anywhere beyond the immediate vicinity of that plant."

The specimens before me all appear to be of the male sex.

In the Collections of the South-African Museum and R. Trimen.

2. *Cyclopid* *Ægipan*, (Pl. VI. fig. 9).

Exp. 1 in. $1\frac{1}{2}$ lin.—1 in. $2\frac{1}{2}$ lin.

♂. *Dark-brown*; cilia shining-brown, much varied with ochreous-yellow in hind-wing. *Fore-wing*: some inconspicuous ochreous-yellow irroration at base, chiefly on costa; beyond middle, on sub-costal nervules, a streak of two or three minute, indistinct, yellowish spots. **UNDERSIDE**.—*Hind-wing*, and border of *fore-wing* (widest at apex) shining yellowish-gray. *Fore-wing*: sub-costal spots faintly marked; at apex an ochreous-yellow stain, extending for a little distance along hind-margin. *Hind-wing*: inner-marginal fold broadly blackish. *Abdomen* conspicuously tipped with ochreous-yellow.

♀. *Fore-wing*: an ochreous-yellow spot in discoidal cell near extremity; sub-costal spots much larger, conspicuous; below them, another spot, between 1st and 2nd median nervules. *Cilia* of *fore-wing* mixed with yellowish-gray; of *hind-wing* pale ochreous-yellow. **UNDERSIDE**.—*Hind-wing* and border of *fore-wing* *yellow*. *Fore-wing*: sub-costal spots conspicuous; other spots almost obsolete. *Hind-wing*: inner-marginal blackish vague, ill-defined.

Described from three specimens of the ♂, and one of the ♀.

This insect is nearly allied to *L. Malgacha*, Boisd., but may at once be recognized by the total absence of spots in the hind-wing. The ♂ *Malgacha* occasionally varies in the spotting of the fore-wing, but the hind-wing markings are very constant in both sexes. *C. Ægipan* is also a larger insect; and the all but spotless upperside of the ♂ has a strong resemblance to that of *C. Lepeletierii*. From the latter and from *C. Syrinx* it is easily known by the absence of pale stripes on underside of hind-wings.

This *Cyclopides* also inhabits the Amatola Mountains, Mr. Bowker having met with it, a day after the discovery of the last-described species, on the summit of the "Hog's Back" in that range. It was "not uncommon among long grass in the neighbourhood of water."

In the Collections of the South-African Museum and R. Trimen.

Genus PAMPHILA, Fab.

1. *Pamphila* (?) *Mackenii*, (Pl. VI. fig. 8).

Exp. 1 in. 1 lin.—1 in. 2 lin.

♂. *Dull sooty-black*: the last four segments of abdomen, and the greater part of hind-marginal edging of hind-wing (with accompanying cilia) *pure white*. *Fore-wing*: usually two indistinct small, whitish, discal spots, between 2nd median nervule and sub-median nervure: *cilia* mixed with whitish. *Hind-wing*: the white edging commences about second sub-costal nervule, and is irregularly dentated inwardly. **UNDERSIDE**.—*Fore-wing*: costa, apex, and most of hind-margin irrorated with yellow; discal spots always visible, sometimes larger than above; on hind-margin, about end of discoidal nervule, a good-sized, circular, whitish-violaceous mark. *Hind-wing*: beautifully varied with white and brownish, and with fine dark-brown hatchings; beyond middle, a broad, dark band, occupying most of hind-margin, much irrorated with yellow, and traversed by an irregular row of dark-edged violaceous lunules.

♀? Duller; the discal spots of fore-wing much larger.

The example which I believe to be a ♀ of this species is much worn; but, with the exceptions above noticed, it does not differ from the ♂.

I doubtingly place this Skipper in the genus *Pamphila*, owing to the remarkable structure of the palpi, the terminal joint of which is very slender, acute, and directed perpendicularly upward, with a slightly-backward inclination. The club of the antennæ is externally edged with pure white.

There is no described species that I know of which nearly approaches *Mackenii*, but a Skipper in the British Museum, from Sierra Leone, strikingly resembles it in the white-tipped abdomen and edging of the hind-wings. The latter, however, is distinct, being of greater size, with a much broader head, and having white spots on the hind-wings, as well as a totally different dark-coloured underside.

I have named this species after Mr. M. J. McKen, Superintendent of the Botanic Gardens at D'Urban, Port Natal, from whom I first received it, and whose zeal in the cause of Entomology is scarcely exceeded by his well-known energy in botanical researches. I subsequently took the insect at D'Urban in June and August, 1865, and again in February and March, 1867. It is a woodland species, and rather uncommon; but generally found in spots of limited extent on the edges of woods, where it jerks rapidly about some favourite bush. I took one specimen on flowers of *Lantana*. When settled, it holds all the wings erect.

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2. *Pamphila dysmephila*, (Pl. VI. fig. 10).

Exp. 1 in. 8 lin.

♀. *Pale brown, much clothed with yellow-ochreous hairs in basal region of wings. Fore-wing*: a small vitreous spot in discoidal cell, just above origin of second median nervule; two similar discal spots, of which the lower one is larger, between first and third median nervules. *Hind-wing*: spotless. *Cilia* grayish-brown. **UNDERSIDE.**—Paler; especially along costa of both wings. *Fore-wing*: vitreous dots as above, but the row continued almost to costal edge by a row of five blackish dots, sharply angulated on discoidal nervules. *Hind-wing*: a conspicuous, straight, white streak from base to hind-margin, running along sub-costal nervure and its second nervule; below streak the ground-colour is darker, gradually shading into paler; a strongly-curved discal row of six blackish dots. Club of *antennæ* blackish, conspicuously white just before the hook.

There is a nearly allied, but much larger *Pamphila*, from West Africa, in the British Museum; but this, besides the difference in size, has on the underside of the hind-wings a much broader whitish stripe, and the nervures also whitish.

The only example of this fine species that I have seen was taken by Mr. Bowker, in March, 1864, on the Bashee River, Kaffraria. It was captured "on a dark cloudy evening, about sunset, feeding at flowers in the garden, long after other butterflies had retired to rest; it flew from flower to flower, taking a sip of honey from each." J. H. Bowker, *in litt.*

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